

Title (en)

OPTICAL ALIGNMENT COMPENSATION SYSTEM FOR A GAS DETECTION SYSTEM

Title (de)

SYSTEM ZUR KOMPENSATION DER OPTISCHEN AUSRICHTUNG FÜR EIN GASDETEKTIONSSYSTEM

Title (fr)

SYSTÈME DE COMPENSATION D'ALIGNEMENT OPTIQUE POUR UN SYSTÈME DE DÉTECTION DE GAZ

Publication

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Application

EP 20198630 A 20200928

Priority

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Abstract (en)

[origin: EP3974813A1] The present disclosure relates to an optical alignment compensation system for a gas detection system, in particular, to an integrated alignment compensation system for an open-path gas sensing system. The optical alignment compensation system of the disclosure is able to compensate for unwanted drifts of a retroreflector. The optical alignment system comprises an array of transceiver pairs, wherein each transceiver pair is configured to transmit and receive light with an optical spectrum in an absorption region of a gas to be detected. Further, it comprises a retroreflector arranged at a nominal position and configured to reflect the light. Further, it comprises an optical element arranged and configured to direct the light from at least one of the transceiver pairs along an optical path through the gas to the retroreflector, to receive the light reflected by the retroreflector along the optical path, and to direct the reflected light to the respective transceiver pair. Further, it comprises a control unit configured to select one of the transceiver pairs for transmitting and receiving the light, wherein the control unit is configured to select the transceiver pair that receives the reflected light with the highest signal response.

IPC 8 full level

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